IN THE CLAIMS:

On page 18, line 1, please cancel "Claims:" and substitute:

--**I CLAIM AS MY INVENTION:**-- therefor.

Cancel claims 1-16

1-16. (Cancelled)

Add the following new claims:

17. (New) A motion sensor for measuring an activity level of an animate subject, comprising:

a fluid-tight housing adapted for placement relative to a subject for co-movement with movements of the subject;

a fluid contained in said housing, said fluid comprising at least one type of anisotropic molecules, having an anisotropic property that changes dependent on motion of said fluid; and

electrodes in communication with said anisotropic molecules for detecting a state of said anisotropic property, said electrodes being accessible from an exterior of said housing to provide an output signal representing an activity level of the subject.

18. (New) A motion sensor as claimed in claim 17 wherein said housing is comprised of biocompatible material, and is adapted for implantation in the subject.

19. (New) A motion sensor as claimed in claim 17 wherein said anisotropic molecules comprise a liquid crystalline polymer.

20. (New) A motion sensor as claimed in claim 19 wherein said liquid crystalline polymer is poly (p-phenylene) having a degree of polymerization equal to or greater than 10.

21. (New) A motion sensor as claimed in claim 17 wherein said anisotropic molecules comprise an electrically detectable component.

22. (New) A motion sensor as claimed in claim 21 wherein said electrically detectable component is covalently coupled to said anisotropic molecules.

23. (New) A motion sensor as claimed in claim 21 wherein said electrically detectable component is selected from the group consisting of magnetic nanoparticles, zwitterionic pairs, and charge-separated ion pairs.

24. (New) A motion sensor as claimed in claim 21 wherein said electrically detectable component comprises iron oxide nanoparticles.

25. (New) A motion sensor as claimed in claim 17 comprising a magnetic field source disposed externally of said housing that generates a magnetic field that interacts with said anisotropic molecules to cause said anisotropic property to be in an initial state, and wherein said electrodes detect deviation of said anisotropic property from said initial state.

26. (New) A motion sensor as claimed in claim 25 wherein said anisotropic property is capacitance, and wherein said electrodes comprise a pair of capacitor electrodes with said fluid disposed therebetween, said capacitor electrodes being oriented perpendicularly to an applied direction of said magnetic field.

27. (New) A motion sensor as claimed in claim 17 comprising a electrostatic field source disposed externally of said housing that generates a electrostatic field that interacts with said anisotropic molecules to cause said anisotropic property to be in an initial state, and wherein said electrodes detect deviation of said anisotropic property from said initial state.

28. (New) A motion sensor as claimed in claim 17 wherein said anisotropic property is capacitance, and wherein said electrodes detect the capacitance of said fluid.

29. A motion sensor as claimed in claim 17 wherein said anisotropic property is resistance, and wherein said electrodes detect the resistance of said fluid.

30. (New) A motion sensor as claimed in claim 17 wherein said housing contains an element interacting with said fluid that produces shear forces in said fluid that alters said anisotropic property of said molecules.

31. (New) An electrically detectable anisotropic fluid comprising a liquid crystalline polymer having molecules covalently bound to an iron-oxide nanoparticle.

32. (New) A cardiac stimulator comprising:

a motion sensor for measuring an activity level of an animate subject comprising a motion sensor for measuring an activity level of an animate subject, comprising a fluid-tight housing adapted for placement relative to a subject for co-movement with movements of the subject, a fluid contained in said housing, said fluid comprising at least one type of anisotropic molecules, having an anisotropic property that changes dependent on motion of said fluid, and electrodes in communication with said anisotropic molecules for detecting a state of said anisotropic property, said electrodes being accessible from an exterior of said housing to provide an output signal representing an activity level of the subject;

a stimulator housing adapted for implantation in the subject;

stimulation circuitry contained in said stimulator housing for generating electrical stimulation therapy signals;

an electrode system adapted for implantation in the subject, said electrode system being connected to said stimulation generator and being adapted to interact with tissue in the subject to deliver said electrical stimulation therapy; and

a control unit in said stimulator housing connected to said stimulation generator, and being in communication with said motion sensor to receive said output therefrom representing said activity level, said control unit modifying said electrical stimulation therapy dependent on said activity level.

33. A cardiac stimulator as claimed in claim 32 wherein said housing of said motion sensor is contained in said stimulator housing.

34. A cardiac stimulator as claimed in claim 32 wherein said stimulation generator comprises a pacing pulse generator.